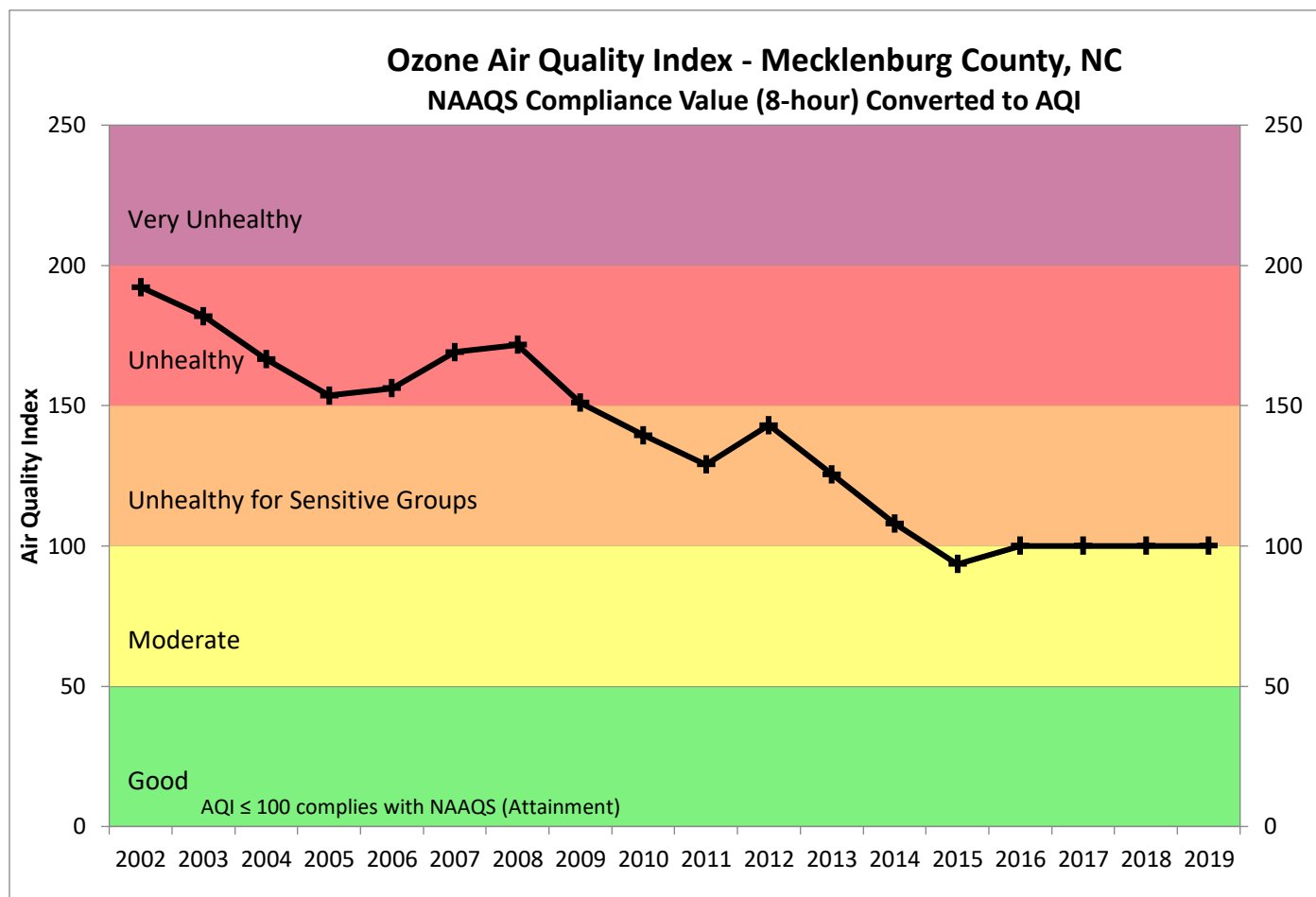




Mecklenburg County Ozone Concentrations are Improving

Ground-level ozone is the primary constituent of smog, and is the criteria air pollutant of greatest concern in Mecklenburg County. Ozone is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. Under the Clean

Air Act, the U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS). NAAQS are a protective, health-based standard for ozone levels in the air we breathe. [Learn more about ground-level ozone.](#)



[Find out more about the color-coded Air Quality Index used in this graph.](#)

Downward trend in ozone concentrations

Ozone concentrations have decreased over 30% over the past three decades.

Changing health-based standards

On October 1, 2015, EPA announced that the health-based ozone NAAQS will be lowered to 70 parts per billion (ppb). The Clean Air Act requires EPA to review the current NAAQS every five years to ensure an adequate margin of safety to protect public health. NAAQS revisions are based on technical input from a scientific advisory committee and the judgment of the EPA Administrator. Based on monitoring data,

the EPA designates areas meeting the standard as “attainment” and areas not meeting the standard as “non-attainment.” A nonattainment area can be re-designated as a “maintenance” area once air quality monitoring data demonstrates compliance with the NAAQS.

In November 2017, EPA recognized Mecklenburg County as being in attainment with the 2015 ozone standard based on monitoring data from 2014-2016, which showed an ozone compliance value of 70ppb.

Historically, the Charlotte region has not met the federal, health-based NAAQS for ground-level ozone. The table below details the region’s history of meeting each revised NAAQS for ground-level ozone.

National Ambient Air Quality Standard (NAAQS) for Ground-level Ozone			Compliance History for Mecklenburg County, NC		
Year Promulgated	Concentration	Averaging Period	Non-attainment Designation Date	Compliance Date	Maintenance Designation Date
1978	120 ppb	1-hour	March 1978	1992	July 1995
1997	80 ppb	8-hour	June 2004	2012	December 2013
2008	75 ppb	8-hour	May 2012	2014	August 2015
2015	70 ppb	8-hour	Not Applicable	2016	Not applicable